2004 Montana Wetland Monitoring and Assessment Meeting

Wednesday, October 6 (am):

Priority Wetland Monitoring and Assessment Needs/Interests Identified by Participants:

1) Development and maintenance of consistent wetland data collection across state entities (e.g., develop rapid assessment core elements)
2) Identify location of wetlands across the state/within watersheds
3) Identify where wetland preservation and restoration is needed
4) Determine wetland restoration needs (such as determining appropriate BMPs)
5) Assess wetland functions values and conditions across the landscape
6) Develop, use, and apply wetland remote sensing protocols
7) Develop and share easier parameters for assessing biological integrity (e.g., rapid assessment indicators)
8) Refine wetland classification systems (for example, combine NWI & HGM systems to classify wetlands in Montana)
9) Assess wetlands using a rotating basin approach
10) Complete NWI mapping
11) Transfer mapped wetland information into a statewide GIS System
12) Develop/Refine statewide clearinghouse to share past and existing wetland information
13) Integrate assessment processes for the purposes of education and volunteer monitoring activity
14) Continue facilitating communication through forums such as these

Volunteer Monitoring:

1) Teams essential to avoid bias
2) Citizen link to private property site access can be a vital key
3) Engage local expertise (e.g., Audubon and Native Plant Society)
4) Comprehensive training is fundamental to success
5) Volunteers useful in classifying wetland types through field verification of mapped wetlands
6) Volunteers can track trends in condition of wetland populations over time
7) Volunteers can establish photo points that can be monitored periodically
8) Volunteers can conduct simple insect, vegetation, bird & amphibian surveys and bioassessments to identify quality wetlands and impacts
9) Volunteers can be used to inventory wetlands (location, type, etc.) within a watershed
10) Volunteers can flag condition of sites and document with photograph. This can lead to prioritization of wetland restoration and preservation activities.
11) Volunteers can flag presence/absence of invasive species (e.g., noxious weeds)
12) Need volunteer coordinator to facilitate and advocate monitoring activity!

13) Coordinator and technical partners/agencies need to develop information products/reports for corresponding communities that incorporate volunteer input
14) Develop a process for interpreting and describing the quality of the data (QA/QC)
15) Create technical advisory board to guide monitoring activities and interpretations of data
16) Engage and share information with local citizen boards

Thursday, October 7 (pm):

Brainstorming components of a consistent core framework/core variables for assessing wetlands within a watershed:

What Watershed scale should we use in order to be consistant:
1) 5th HUCs (then subdivide by considering eco-region when appropriate)
2) Some assessment efforts may require smaller or larger watershed scales

Who Should be Involved:
1) Technical support to find and assemble existing data and determine local history
2) Conservation/Water Quality Districts
3) Land Trust and nonprofits
4) County governments
5) Tribes
6) Land owners
7) Local watershed groups, associations and agencies

What questions/objectives should we consistently address using Level 1/Landscape assessment protocols to assess wetlands:
1) Assess wetland functions and values at the landscape level
2) Assess location and spatial distribution of wetlands
3) Determine relative abundance of wetland HGM classes within a watershed/ecosystem (Wetland Profiling)
4) Assess wetland density and connectivity
5) Us soils maps as indicators of where wetlands were/are.
6) Determine Ownership
7) Determine wetland fit in the landscape (wetland position)
8) Assess upland condition and land uses (potential stressors)
9) Develop and use existing GIS layers to identify stressors and infer wetland condition
10) Flag potential reference or impacted sites

What questions/objectives should we consistently address using Level 2/rapid assessment protocols:

1) Photo documentation and establish photo points for trends
2) Determine if wetland is artificial vs. natural
3) Develop a consistent approach for defining wetland assessment area
4) Flag potential reference sites
5) Estimate total area of vegetation (structural - habitat)
6) Estimate upland condition (buffer area)
7) Identify local land use activities
8) Categorize wetland condition and determine probable stressors
9) Identify invasive species (e.g., weed infestations)
10) Verify wetland locations and wetland class (e.g., HGM)
11) Characterize hydrologic morphology
12) Flag unique wetlands
13) Document sightings of species of special interest (e.g., amphibians)
14) Identify and estimate wetland functions and values

What objectives can be achieved using Level 3/Intensive:

1) Identify reference reach and determine wetland potential
2) Assess wetland biological conditions and identify stressors
3) Identify and quantify invasive species
5) Quantify wetland functions
6) Verify and calibrate rapid assessment protocols
7) Identify unique wetlands and rare species
8) Wetland delineation